

Getting the Story Straight: Language Fieldwork Using a Narrative Problem-Solving Task

Lila San Roque
Max Planck Institute for Psycholinguistics

Alan Rumsey
Australian National University

Lauren Gawne
University of Melbourne

Stef Spronck
Australian National University

Darja Hoenigman
Australian National University

Alice Carroll
[Illustrator]

Julia Colleen Miller
Australian National University

Nicholas Evans
Australian National University

We describe a structured task for gathering enriched language data for descriptive, comparative, and documentary purposes, focusing on the domain of social cognition. The task involves collaborative narrative problem-solving and retelling by a pair or small group of language speakers, and was developed as an aid to investigating grammatical categories relevant to social cognition. The pictures set up a dramatic story in which participants can feel empathetic involvement with the characters, and trace individual motivations, mental and physical states, and points of view. The data-gathering task allows different cultural groups to imbue the pictures with their own experiences, concerns, and conventions, and stimulates the spontaneous use of previously under-recorded linguistic structures. We argue that stimulus-based elicitation tasks that are designed to stimulate a range of speech types (descriptions, dialogic interactions, narrative) within the single task contribute quantitatively and qualitatively to language documentation, and provide an important means of gathering spontaneous but broadly parallel, and thus comparable, linguistic data.

1. INTRODUCTION.¹ In this paper we describe a structured task for gathering enriched language data, originally designed for a project that examines the grammaticized expres-

¹ Many people assisted in the development and undertaking of the narrative problem-solving task. Thanks to members of the Social Cognition and Language project group, attendees at the 2009 Kioloa Workshop, and all participating researchers and language speakers, especially Clair Hill, Barbara Kelly, Petros Kilapa, Andrea Schalley, Chikako Senge, and Tony Woodbury. Thanks also to Asifa Majid for comments on an earlier draft of this paper. The work reported here was supported by Australian Research Council Discovery Project 0878126 (Language and Social Cognition: The Design Resources of Grammatical Diversity, under Evans' leadership). In this paper, individual authors are responsible for information concerning their languages of expertise, as specified in Table 1. Information concerning data management has been provided by Miller, and Carroll created the original picture task images (Carroll et al. 2009). The first and last named authors are responsible for other content.

sion of social cognition. Frith and Frith define social cognition as “the sum of those processes that allow individuals of the same species (conspecifics) to interact with one another” (2007:R724). It must represent both “social facts” (such as kinship relationships) and “psychological facts” (such as feelings, desires, or attentional states), and pervades many areas of grammar—the representation of the enduring social world (e.g., relatively stable relationships), of the social consequences of external events, and of the psychological states of a range of participants (speaker, hearer, reported other). Perhaps most complex of all, social cognition in language must index and focus on numerous details of the speech act, as well as working to advance the communicative goals of the speaker in bringing about actions and/or changes in representation by other speech act participants. Social cognition is a highly complex area semantically, distributed across many parts of the language system (grammar, lexis, prosody, gesture, and other non-verbal cues), and also one which exhibits major cross-cultural and cross-linguistic difference, as we will see from examples in this article. The task described herein provides material on myriad linguistic phenomena both within and beyond this domain, some of which are illustrated here, and many of which are not easily elicited using other techniques or existing stimulus materials.

The task solves three design problems: (a) it stimulates a range of speech types within a single task (descriptions, dialogic interactions, narrative), (b) it seeds a high density of occurrence for linguistic expressions relevant to the domain of social cognition, and (c) it provides broadly parallel textual material across languages while maintaining spontaneity and putting the speakers largely in the driver’s seat in terms of what they choose to say. The research program for which the task has been designed is still at an early stage in terms of analyzing the materials we have begun to record. We are publishing information now in the hope of stimulating other field linguists to gather material using this task, which can ultimately be fed into broader comparative studies of how social cognition is expressed linguistically, as well as for other purposes like comparative narratology or the study of the effects of repetition and rehearsal on phonetic realization.²

The task, which we will call the *Family Problems Picture Task*, involves collaborative narrative problem-solving and retelling by a pair or small group of language speakers, undertaken in three broad stages:

- (i) The participants look at and describe a group of pictures, one picture at a time.
- (ii) They construct a sequential, logical relationship between them, arranging them into what they regard as a coherent plot sequence.
- (iii) Finally, they relate the events as a single narrative, to a fresh audience who has not witnessed the first two stages. This third phase may in turn be elabo-

² We mention these as two representative by-products of a task that was designed with other goals in mind, and will say nothing further about them in this paper. However, we note that (a) for comparative narratology, issues of scene ordering and how it is negotiated arise in revealing ways in running the task, and (b) in terms of repetition, rehearsal, and phonetics, the multi-stage nature of the task means that in practice, the same word—and often the same phrase or sentence—is repeated many times in the course of 20–30 minutes, affording a naturalistic way to study micro-modifications in phonetic production through time.

rated by including both third- and first-person narratives, and telling the first-person narratives from the point of view of more than one of the characters.

To date, the activity has been carried out with speakers of more than 20 languages from Africa, Australia, Europe, Asia, and Papua New Guinea (PNG), detailed further in section 2. In section 3 we describe the stimulus materials and task structure in more detail, as well as the rationale behind them—namely, to elicit language material that is especially rich in social cognition content, such as reported thought, feeling and speech, epistemic assessment, the depiction of social relationships between participants, and depiction of the social ramifications of events on the characters involved. Section 3 also sketches the optimum situations and techniques that are aimed for in recording, as well as the archiving intentions of the project.

Section 4 gives an overview of how the task has been received and performed so far, and what kinds of material have been recorded. The picture-sequencing task can inform us about languages and their matrix cultures in diverse ways. These range from core linguistic concerns—grammatical structures, lexical and constructional semantics, prosody—to issues of interest to conversational analysts, such as question-and-response patterns, on to broader communicative devices like gesture, and beyond these to ideas about behavioral and societal norms, narrative practice, aesthetics, and the identification of domains (e.g., kin relationships) that people commonly orient toward and talk about frequently and in detail. Each of these topics can also be examined from a comparative viewpoint, and the interactions between them examined.

Finally, in section 5 we comment on how stimulus-driven data contributes to rich and representative documentation of a language, particularly in regard to the problem of gaining comparable but naturalistic text material across a broad range of languages.

2. BACKGROUND.

2.1. STIMULI FOR STRUCTURED LANGUAGE ELICITATION. Structured language elicitation tasks that use stimulus materials are now an integral part of linguistic research, and provide an important complement to more traditional corpus and elicitation methods of language description and documentation (Majid 2012). A major goal of all such stimulus types is to provide data that is at the same time naturalistic and parallel, and which is as useful in giving insights into a single language as it is in enabling cross-linguistic comparison.

Important examples of such tasks include investigation of the encoding and expression of particular semantic domains (e.g., space, Levinson & Wilkins 2006; the body, Enfield 2001, Van Staden & Majid 2006; reciprocals, Evans et al. 2011), or relationships between these domains (e.g., body metaphors in landscape description, Bohnemeyer 2001; spatial relationships and stance verbs, Hellwig 2006). A wealth of stimuli have been developed that support detailed examination of abstract comparative topics such as event structure (e.g., Berman & Slobin 1994; Majid et al. 2008), narrative structures and practices (e.g., Chafe 1980), and relationships between linguistic categories and perceptual experience (e.g., Mitterer et al. 2009).

Linguistic stimuli (as opposed to, e.g., pictorial stimuli) include translation, questionnaire, and explicit translation tasks. These are very valuable tools for within-language study

and cross-linguistic comparison, but also risk producing stilted responses that are strongly affected by meta-linguistic judgments and problems of translational non-equivalence. The alternative, non-linguistic stimuli materials, can be broadly divided into three types:

- (a) those that encourage extended narrative production, for example, through asking participants to tell a depicted story (e.g., the Pear and Frog stories),
- (b) those that require people to describe, categorize, and/or compare sets of non-linguistic stimuli (e.g., color chips, pictures of spatial relations), and
- (c) those that elicit dialogic negotiation (e.g., the Map task³), classified by Lüpke (2009) as “interactive stimuli.”

Many tasks are designed to combine more than one of these elements. For example, instead of simply asking individuals to verbally process materials in a certain way (e.g., naming, comparing, as per *b*), one can ask a pair or group of participants to perform a problem-solving or matching task using the stimuli in (c). A well-known example is the Nijmegen Space Games (Senft 2007)—see also other items available through the L&C Field Manuals and Stimulus Materials website, <http://fieldmanuals.mpi.nl/>.

The picture-sequencing activity described here aims to combine all three elements in the course of a single task,⁴ while at the same time generating differences in known vs. new information among different participants. As far as content is concerned, it is particularly focused on obtaining rich materials relevant to the far-reaching domain of social cognition—whether manifested through the depictions of events, relationships, and mind-contents of characters (particularly relevant to task type *a*), through alterations to the mental representations of narrator and audience through time (task type *b*), or to negotiations, mutual adjustments, footing relations, and speech acts between the participants (task type *c*). Ideally, the configuration allows language fieldworkers to record descriptive and interactive data in a structured situation that allows for inter- and intra-language comparison, but is nevertheless spontaneous, informal, and sympathetically pitched. The activity does not, however, set up a single tightly controlled investigation space, and is designed as a “broad-spectrum” task rather than as an exhaustive trawl through differing points in a given semantic domain. The “rules” of the picture-sequencing are quite flexible and open-ended, and the same materials can be used for different activities (see also Hill 2011 concerning the combined use of more rigorously constrained and more freely associative stimuli and tasks).

The stimuli used are black and white illustrations, which are readily reproducible and portable, and easy to view and manipulate without any additional technology. The drawings have less overt content and sensory richness than, for example, live-action video clips, but they have an advantage in that they can conventionally represent speech and internal utterance (two focus areas of social cognition) without priming specific types of linguis-

³ See <http://groups.inf.ed.ac.uk/maptask/maptask-description.html>

⁴ A similar narrative problem-solving task is the “Mr. O.” activity, developed under the direction of Sachiko Ide at Japan Women’s University (Kita & Ide 2007). We only became aware of this study after designing our own task.

tic representation. Illustrations arguably draw the viewer into a story by asking them to creatively interpret the thoughts, speech, and emotions of the characters (see also Majid 2012:11–13). We aimed for something of an “everyman” effect in the characters and places that were represented in our pictures, but with a focus on a tropical environment and non-industrialized, non-WEIRD⁵ societies. This is significant in that it differs from biases towards representation of white Anglo or European people, artifacts, and/or activities—or highly abstracted entities—that are often present in stimulus materials.

Language name	ISO 639-3	Linguistic affiliation	Primary homeland of main language consultants	Number of speakers in 2011 (approx)	Main researcher
Awiakay	-	Arafundi, Lower Sepik-Ramu	Kanjimei village, East Sepik Province, PNG	300	Hoenigman
Duna (Yuna)	duc	Duna-Bogaia, Trans New Guinea	Kopiago, Southern Highlands (Hela) Province, PNG	25,000 (Haley 2002)	San Roque
Iwaidja	ibd	Iwaidjan (Australian, non-Pama-Nyungan)	Croker Island, Northern Territory, Australia	150	Evans
Japanese	jpn	Japonic	Kyoto and Tokyo, Japan	130 million	Evans ⁶
Ku Waru	mux	variety of Bo-Ung, Chimbu-Wahgi, Trans New Guinea	Kailge, Western Highlands Province, PNG	10,000 (total Bo-Ung speakers = 40,000)	Rumsey
Lamjung Yolmo	scp	Bodic, Tibeto-Burman	Lamjung region, Nepal	1,000	Gawne
Ngarinyin	ung	Worroran (Australian, non-Pama-Nyungan)	Mowanjum, Western Australia, Australia	100 (some only semi-speakers)	Spronck

TABLE 1. The focus languages of this article

⁵ WEIRD = Western Educated Industrialized Rich and Democratic—see Heinrich et al. (2010) on the distorting effect that taking such people (prototypically American college psychology sophomores) as representative of pan-human cognition has had on the field of psychology.

⁶ Evans gratefully acknowledges the assistance of Chikako Senge in transcribing and translating the Japanese material, and of Masa Onishi and Midori Osumi in setting up the tasks in Kyoto and Tokyo respectively.

2.2. THE LANGUAGES. Versions of the picture-sequencing activity have to date been carried out with speakers of Avatime, Awiakay, Bulgarian, Burmese, Dalabon, Duna, English, Fas, German, Iwaidja, Japanese, Kannada, Khasi, Kriol, Ku Waru, Lamjung Yolmo, Mexican Spanish, Momu, Ngarinyin, Solega, Tuva, and Umpila. In this paper we focus on the procedure and results for the languages shown in Table 1, with some additional comments concerning certain of the other language groups.⁷

Overall, individuals who participated in the task have very diverse levels of formal schooling and experience with books and illustrations. Most speakers of the smaller languages shown in Table 1 live in rural and/or remote communities. These smaller languages are still learned as first languages, with the exception of Ngarinyin, for which most speakers are over the age of 45. The smaller languages are generally in some competition with a larger regional or national language, such as Tok Pisin for Awiakay, Duna, and Ku Waru, or Nepali for Lamjung Yolmo.

3. THE DATA-GATHERING TASK.

3.1. AIMS AND OVERVIEW. The basic frame of the stimulus-based task is that two participants are presented with a set of pictures, one at a time, that depict people and events which suggest a continuous narrative with recurring characters—at least, after the first few have been viewed. The two participants talk together about the pictures and arrange them (spread out on a flat surface) to form a coherent story, which they then relate in its entirety to someone who has not witnessed the first phases. In a final, optional phase, one or both participants retell the story in the first person from the viewpoint of one of the characters. The process is video-recorded by the researcher or a facilitator.

As already mentioned, the task was devised as a field elicitation tool for recording language material especially rich in social cognition content. It was primarily designed to stimulate exposition and discussion that includes a high amount of speech and thought reporting, use of “cognitive categories” such as evidentiality and mirativity, and reference to emotion. These elements are prompted in at least three different ways.

First, the task encourages narration of complex psycho-social conditions and situations, for example, in describing the conversations, perceptions, relationships, and feelings of the story characters.

Second, the problem-solving nature of the task stimulates participants to express (constructionally, lexically, morphologically, prosodically, or otherwise) their own processes of observation, inference, and discovery, and judgments of doubt or certainty.

Third, the task is interactive and leads to the participants engaging in implicit and explicit direction and assessment of each other’s knowledge and attention, for example, when they ask what the other sees or thinks. As they progress through the different phases of the activity, participants deal with emerging situations of potential knowledge symmetry (e.g.,

⁷ For further information on the smaller focus languages, see the following works: Awiakay, Hoenigman (2007, forthcoming); Duna, Giles (n.d.), Rule (1966), San Roque (2008); Iwaidja, Pym & Larrimore (1979), Evans (2000a, 2000b); Ku Waru, Merlan & Rumsey (1991), Rumsey (2002, 2010); Lamjung Yolmo, Hari & Lama (2004), Hari (n.d.); Ngarinyin, Coate & Oates (1970), Coate & Elkin (1974), Rumsey (1982).

between the initial problem-solving pair) and asymmetry (e.g., for the new participant that is told the story in full), as well as differential access to subjective information (e.g., as a third-person narrator and as a first-person character).

Expressive and evaluative content concerning the story is also relevant to categories of social cognition—for example, ideas concerning social responsibilities and consequences. As we explore further in section 4.1, the pictures and the story can work as a kind of Rorschach Test (i.e., ambiguous designs open to multiple interpretations) that provides a medium for the expression of cultural concerns and conventions.

3.2. THE MATERIALS. The stimulus materials consist of 16 picture cards⁸ from original drawings by Alice Carroll, with an instruction sheet. The illustrations are described in Table 2. Eight of the pictures are reproduced in Figures 1–2 and 6–11, and the full set is available as Appendix 1. For field use, the pictures are printed at A5 size (148 x 210mm) on relatively heavy stock paper and laminated to make them easy to handle and less likely to blow away or get damaged.



FIGURE 1. Walk together (Picture 6)



FIGURE 2. Court room (Picture 5)

The illustrations can be interpreted as depicting a core family group (woman, man, young child; see Figure 1) and some additional characters (market stall worker, bearded man, sundry drinking mates, and police and court officials; see Figure 2). The pictures are seeded with a few potential chronological problems and elements of mismatch to encourage the verbalization of reasoning processes or debate about the correct order, and there is no single “correct” arrangement. Although the story was originally designed with the pictures occurring in a particular sequence—the “canonical order,” indicated by the letters *a–p* in Table 2—many other arrangements of the pictures are possible, and the main aims of the task are compatible with any activity in which people talk about the pictures,

⁸The original set included 17 pictures. After trials, it was judged that two of the pictures (a “long shot” and “close-up” of the same scene) were so similar that only one of them needed to be included.

regardless of any order in which they are arranged. For example, many versions placed a picture of a (former) alcoholic and perpetrator of domestic violence, walking with his son and turning down the invitations of his one-time drinking partners to join them, as the final “happy ending” frame. But others, in a less optimistic view of the reformability of human nature, followed this “reformed alcoholic” scene with another in which he is back drinking with his old mates.

We wanted the people, places, and institutions in the pictures to resonate with a wide range of cultural and geographical groups, but also followed a generic “village” bias, as it was especially important that members of small communities be able to feel that the depicted environment, societal structure, and official procedures were recognizable, if not wholly familiar (see also section 4.1.2).

Overall, the pictures set up a dramatic, sometimes confusing story with which task participants can feel shock or disgust, or empathetic involvement with the characters, and can trace individual motivations, mental and physical states, and points of view. Descriptions of speech, thought, perception, and emotion are stimulated in several ways. The conventions of speech bubbles and thought bubbles are used in showing what a character is saying or thinking (see, e.g., Figure 2). The content and attitude of a character’s feelings or utterances is also intimated by facial expression, gestures, and posture: for example, the bowed head of the central character in court (Figure 2). Some aspects of the scenes were designed to elicit particular kinds of grammatical categories that are known to exist in the world’s languages. For example, the older bearded man, looking on from a distance in pictures 12 and 15 (see Figure 11) was included in the scene because of the possible relevance to languages that explicitly mark events as witnessed or unknown, such as the Dalabon prefix *molkkûn*- ‘unbeknownst (to someone)’; see Evans (2010:64–65).

	Short label	Description	
1	Homecoming	A smiling man (M) approaches a house with his arms outstretched. A woman (W), child (C) and older man are sitting/standing around the house. They watch M approach with downcast expressions.	n
2	Receiving clothes	Inside a building with barred doors, a man in uniform hands M a folded pile of clothes.	l
3	Alone in the cell	M huddles in the corner of a dark room with a barred window. A plate of food is on the floor beside him.	j
4	Drunken gossip	M is sitting talking with another man (B). They are both holding bottles. M’s fist is clenched. B’s speech bubble contains an image of W talking with a young man, resting her hand on his arm.	d

5	Court room	Three men, one of them uniformed, are seated at a table with piles of papers in front of them. In the same room, W sits on a stool with her face bandaged. Her speech bubble shows an image of M striking her on the chin. M sits on another stool with his face in his hands.	h
6	Walk together	W, M, and C walk down a road together, carrying baskets of pumpkins. The corner of a market stall can be seen in the foreground.	b
7	Sitting drinking	M sits drinking with a group of men, including B. There are lots of bottles on the ground around them.	c
8	Garden together	M and W are picking pumpkins in a garden.	a
9	Arrest	M is being carried away by two uniformed men. W crouches on the ground clutching C. Her face is bruised or bleeding. A smashed bottle lies on the ground near her.	g
10	Thinking of jail	M sits with his hands cuffed. He has two thought bubbles, one showing him being hit by police, another showing him looking out through a barred window.	i
11	Refusing drink	M and C walk past two men who wave at them and hold out bottles. M holds his hands palms-out towards the drinking men. C folds his arms and does not look at them.	p
12	Hitting	M and W are standing on a pathway; W is holding C. M is punching W hard on the chin with one hand. He is holding a bottle in his other hand. In the background a bearded figure with a walking stick looks on with his hand to his mouth.	f
13	Family talking	M sits talking with W and C. His speech bubbles show him huddled in a dark room and sitting by a window with his eyes closed.	o
14	Standing in light	M stands outside a building, hands on hips and face toward the sky.	m
15	About to hit	M and W are standing on a pathway. M's fist is raised and W shrinks away from him, holding C. In the background a bearded figure with a walking stick looks on. M's speech bubble contains an image of W talking with a young man, resting her hand on his arm. W's speech bubble shows a similar scene, but she is giving money to the young man in a marketing transaction, not touching him or talking to him.	e
16	Thinking of home	M sits alone in a dark room with a barred window. In his thought bubble he approaches a house. W comes down the steps smiling and C runs toward M with his arms outstretched.	k

TABLE 2. The pictures, listed in presentation order. (Canonical order shown by letters.)

3.3. PARTICIPANTS. At a minimum, running the picture task requires two participants, and preferably three. Researchers are encouraged to work with pairs or groups of participants that know each other well and do not have typically asymmetrical roles. For example, in a Highland New Guinea context, researchers have often aimed to work with same-sex pairs, as trials had suggested that female participants would not talk much in mixed-sex pairs (see also Zimmerman & West 1975 for an early study of differences in turn-taking between same-sex and mixed-sex pairs of American white middle-class interactants). It is hoped that within-pair familiarity encourages people to offer an unconstrained and engaged response to the stimuli and each other. For languages with larger speaker groups, it can also be informative to work with participants of different backgrounds where possible (e.g., according to education, social status, languages spoken, etc.).

In some locations, field consultants have assisted extensively in running and recording the task, for example explaining the activity and conventions to the participants, and in designing procedures and protocols. The pictures deal with situations of alcohol abuse and family violence that are considered extreme in some communities, but viewed as quite typical by others. Individual researchers and their language consultants must assess whether these themes are appropriate for viewing and discussion by all community members, and select participants accordingly. Participants also need to understand that they are being audio- and video-recorded, and that, depending on the permissions they give, other people may have access to these recordings (see section 3.5).

3.4. PROCEDURE. The picture task involves one core activity (“Set-up 1”) with three components, described in section 3.4.1. Some additional extensions and variants of the task have also been recorded, and one of these is described in section 3.4.2.

In initial trials (with English, Japanese, Ku Waru, Bulgarian, and Duna speakers), pictures were presented to participants in any order, simply as they came to hand. The presentation order has now been standardized, so that people become acquainted with the pictures in the order shown in Table 2. This presentation order was chosen to increase the difficulty of the narrative puzzle, requiring a good deal of rearrangement to establish certain sequences in the story, and thereby encouraging hypotheses about the depicted situations that would possibly be challenged by subsequent pictures.

Future iterations of this task will possibly include a preparatory exercise, for example the Jackal and Crow task developed by Barbara Kelly and associates (Carroll, Kelly & Gawne 2011), which has already been trialled with Fas speakers by Tom Honeyman. For speakers unfamiliar with the usual conventions of speech and thought balloons, this is a good way of preparing them to deal with the pictures that include such visual devices.

3.4.1. SET-UP 1. Two participants (A and B) sit together, either side-by-side or oriented slightly toward each other, with an open flat space (e.g., the ground, a table) in front of them. The activity involves three components:

- (i) the participants are given the pictures one at a time and describe the content of each (Figure 3a);
- (ii) the participants are asked to arrange the pictures as an ordered narrative, working together (Figure 3b);

- (iii) participants are asked to tell the story from start to finish, from both third-person and first-person perspectives, typically to an audience that had not seen the pictures or heard the story before (Figure 3c).



FIGURES 3a-c. Duna participants Petros Kilapa, Jeffery Richard, and Julinda Petros (Bertie Yoke in background, Lila San Roque in foreground), Kapiaga 2009.
Images: Christopher Haskett.

Each component of the activity is typically associated with a different kind of data, discussed further in section 4. For example, the second phase (collaborative arrangement of the pictures) generally gives rise to directly interactive content, with frequent directives and queries concerning the placement of the pictures, as well as talk concerning one's own processes of thought and discovery.

The suggested instructions for researchers to use at each of these steps are reproduced below (see also the Appendix). These wordings are not necessarily strictly followed in the field, but are translated, paraphrased, and augmented by researchers and language consultants as necessary.

Instructions for Researchers

1. Individual card descriptions

I'm giving you some pictures, one at a time, and I want you to tell me what's in them. Please describe what's happening.

2. Arranging into an order

Now please put these pictures together to make a story. Choose whichever way you think works best. Different people tell different stories with these pictures.

3a. Telling the whole story, with the pictures, to an (if possible, naïve) audience

Now tell [participant C] the story in the pictures.

3b. First-person tellings

Now retell it, pretending you are one of the people in the story, for example this man or this woman. Explain what's been going on in your life.

There are a few things to keep in mind when presenting the basic task. Where required, the speech/thought bubble convention may need to be explained to participants (see also

section 4.1.3). For step 2, it may be important to stress that the participants are making *their own* story, and are not being tested to see if they can get the “right” answer. Where possible, the audience for step 3 should be someone who has not seen the pictures or heard the story before, and participants A and B should both know this.

3.4.2. SET-UP 2. Set-up 2 uses a reduced set of five pictures (5, 7, 9, 12, and 15). It was designed in collaboration with Petros Kilapa, and was undertaken one time with Duna speakers. Participants A and B sat back-to-back, with A holding the pictures in such a way that B could not see them. Participant A described what was happening in the five pictures, and B, based entirely on A’s description, directed A in the order the pictures should be laid out, from first to fifth. After this, B was able to look at the pictures, and the pair together retold the story as a whole.

Set-up 2 was intended to create asymmetry in visual accessibility and encourage the use of question-and-response sequences between participants. These features were especially desirable in the Duna case because of the evidential and other knowledge-related bound morphemes that are present in the language (see San Roque 2008), all of which are relevant to social cognition. Sentence type (e.g., declarative vs. interrogative) and knowledge symmetry between speaker and addressee were already known to be important factors in regulating the use of certain morphemes, and more interactive, semi-controlled data were desired to explore them further.

3.5. RECORDING AND DATA MANAGEMENT. Where desirable, the activity should be recorded simultaneously with both video and audio equipment.⁹ If two video cameras are available, one can be used to film the participants laterally and the other suspended above the workspace to film a bird’s-eye view of the picture arrangement (Figure 4). This parallel filming method was inspired by the recording of Alyawerre sand-drawing narratives pioneered in Green (2009). Where only one camera is available, a separate (or written) record is made of the order in which the pictures end up (e.g., by taking a photograph of the layout at the end of the session).

Recordings associated with the structured picture tasks, including Family Problems, Jackal and Crow (Carroll et al. 2011), and the Frog Story (see Berman & Slobin 1994), are being archived in a collection called *SocCog* within the Pacific And Regional Archive for Digital Sources in Endangered Cultures (PARADISEC: <http://www.paradisec.org.au/>). The materials to be archived include video, audio, photos, and any completed transcription files (ELAN, Transcriber, PDF, etc.). At the present time, items must be deposited through one of the PARADISEC portals in Canberra, Melbourne, or Sydney, as no online upload facility is currently available.

⁹ Using external audio equipment allows for a microphone to be placed very near the participants without extra cabling that might impede the task activity, provides an additional backup recording, and can be very useful for transcription purposes (e.g., where power is limited and it is not possible to immediately transfer video material to a convenient transcription platform).



FIGURE 4. Awiakay participants Mesia Yawas and Robina Tikinjao, filmed using two cameras. Images: Darja Hoenigman (lateral view) and Alan Rumsey (bird's-eye view).

Participating researchers enter comparable metadata for each deposited item directly into the PARADISEC catalogue. The target metadata fields include those required by PARADISEC: persistent identifier, item name, date created, countries, collector, and access specifications. Additional fields are language (ISO 639-3 code format), language as given (your target language may not yet have an ISO 639-3 code), and notes (further useful information). These fields are all publicly visible in the catalogue.

A series of informative documents has been developed and can be accessed online with a personal login (see Appendix 1 for details). These items are designed to help depositors as well as potential users of the materials. The first two items are forms to be filled out by the depositor in order to provide PARADISEC staff with (i) the necessary information to establish a PARADISEC user account, and (ii) a deposit form to be archived along with the data. Two step-by-step guides (Miller 2011a, 2011b) provide instructions for depositing the materials, including file naming conventions, which metadata are necessary, and how to enter metadata into the catalogue. An additional document informs users on topics such as how to access recordings and how to cite items in the corpus. The archive also houses copies of the elicitation materials and documents relating to their use.

4. PRELIMINARY RESULTS. In section 4.1 we describe features that reveal different approaches and attitudes to the stimuli and to resolving the central puzzles of organizing and explaining the pictures. In 4.2 we discuss three specific aspects of linguistic data collection that the structured task has supported so far. Section 4.3 suggests future directions for analysis and comparison.

4.1. SHAPING THE TASK.

4.1.1. OVERVIEW. Researchers and their language consultants have taken a flexible approach to using the stimuli materials. Elements of the procedure can be changed to fit individual circumstances without disrupting the project aims (see also Du Bois 1980). For example, if more than the minimum two people want to take part in describing and arranging the pictures, as has happened on several occasions, this has been easily accommodated.

Retelling the story as a first person narrative was in fact innovated by an Iwaidja participant, and made such a valuable addition to the task that it is now included as a standard component. When Rumsey ran the task with Ku Waru speakers in 2011, one participant insisted that the narrative for the “first-person” component be not only told, but also acted out. This led to an extended retelling of the story with family members and other bystanders as players in the performance. Figure 5 shows an image from this performance at the point in the story where the father (John Onga, standing with outstretched arms) returns home from jail and receives a frosty reception from his son (Jesi, leaning on the table in front of John). Wapi John (standing by the window) directs the action and Kuin Andrew (seated to Wapi’s right) observes. The pineapple and bananas visible on the table are prop from an earlier gardening scene.



FIGURE 5. Ku Waru participants act out the “homecoming” scene.
Image: Alan Rumsey.

Practical problems for running the task can include the usual difficulties of finding a space with good lighting (which often means using an outdoor area; see Figure 6), low ambient noise, and minimum wind interference. It is not easy to keep all the participants and pictures in the shot with the detail and visibility necessary for identifying which elements of which pictures people are looking at, pointing to, and so on. The two-camera rig (section 3.5) obviates this latter problem.

Different individuals and groups respond to the disturbing nature of the pictures’ content matter in different ways. In several cases the situations portrayed have been immediately identified as being “just like” home—one speaker said, “This is my life, this is what has happened to me.” Participants from different backgrounds have been excited to note similarities between their own experiences and those of other communities. Some people have found the activity a good opportunity to talk further about alcohol and family violence problems, and participating Iwaidja men wanted the story replayed to youth in their community as a cautionary moral parable. Duna participants were supportive of the idea of

reproducing the pictures in booklet or poster form with accompanying vernacular text.¹⁰ For groups such as the Lamjung Yolmo, alcohol and related problems are not a major social issue, and the themes of alcohol and violence were somewhat alien and unfamiliar (see also 4.1.4).



FIGURE 6. Dalabon participants Lily Bennett and Nikipini Dalak carrying out the task in Beswick, NT, in June 2009, with Nick Evans to the side.
Image: Linda Barwick.

In the following sections we describe particular aspects of people's interpretations of the depicted events in more detail. These indicate how different cultural groups can imbue the pictures with their own experiences, concerns, and conventions, providing rich material for anthropological enquiry.

4.1.2. IDENTIFYING PEOPLE, SITUATIONS, AND OBJECTS. Generally, participants have been open to identifying the people and situations represented in the pictures through the lens of their own culture. They readily construct relationships between characters, and recognize them as carrying out specific social behaviors. These have often been quite different from the original conception of the pictures. For example, picture 1, "homecoming," where the main male character approaches a house, was taken by Ku Waru speakers to be an overture to marriage, with the younger man coming to negotiate bride-price with the woman's family. The Awiakay participants interpreted picture 2 (see Figure 7), in which a man in uniform is handing clothes to the main male character, as depicting reconciliation: the uniformed figure was believed to be a teacher (based on the fact that teachers wear

¹⁰ Members of the Summer Institute of Linguistics, Papua New Guinea Branch (SIL-PNG) in fact sometimes employ a "sequencing task" technique in developing local literacy materials from Shell Book templates. Language consultants are asked to look at and arrange the pictures in a way that makes sense, and a new vernacular language version of the story is written around that arrangement (SIL-PNG Literacy Centre staff to San Roque, pers. comm., 2009). See also the work of the Komuniti Tok Piksa group, based in Goroka, PNG, which uses the community creation of narratives with visual media in programs for HIV/AIDS education and management: <http://www.yumipiksa.org/ktpl/>.

“smart” clothes) compensating another man for some wrongdoing. This same scene was seen by one Iwaidja speaker as a happy ending to the story, where the main character has secured a stable job as a Park Ranger and is being handed his uniform.

Social/kin relationships have been highly elaborated by some groups (see also section 4.3). For example, the bearded man who “talks about” a woman interacting in a (suspiciously) friendly manner with a young man in picture 4 (see Figure 8) was identified by one Duna group as the woman’s (classificatory) father. This may reflect tensions surrounding allegiance in in-law relationships in Duna society, where it can be politic for a man to establish solidarity with his wife’s relatives through common criticism of the unfortunate bride. Problems in a union may thus be localized to a less powerful female individual, rather than causing a wider rift between the wife’s and husband’s male kin (see also Stürzenhofecker 1998).



FIGURE 7. Receiving clothes (Picture 2)



FIGURE 8. Drunken gossip (Picture 4)

Characters’ depicted gestures and bodily attitudes are often strongly identified as indicative of emotions and speech (see also 4.2.1). They have also inspired indications of appropriate ways to respond to others’ demonstrated emotion. For example, in considering picture 3, where the main male character sits on the ground with his head on his knees (Figure 9), an older female Duna speaker took the opportunity to berate the character for his abusive behavior, commenting (using direct address) that he felt ashamed and sorry for himself now, and so he should. For picture 9 (Figure 10), one Awiakay participant commented that the female character should not be disturbed, as she had bowed her head in worry because of her husband’s arrest. However, even within the same cultural group, postures were not always identified in similar ways: other Awiakay speakers decided that the woman in picture 9 had just given birth, conforming to the common practice of giving birth in crouching position.



FIGURE 9. Alone in the cell (Picture 3)



FIGURE 10. Arrest (Picture 9)

People's interpretation of depicted inanimate objects has also varied, and a lot of attention—sometimes more than that given to the story—has been paid to specific details in the pictures. Lamjung Yolmo speakers initially found it more sensible to interpret the containers in certain of the pictures (see, e.g., Figure 8) as being for medicine rather than alcohol, the latter being a fairly unfamiliar substance in their community, while Japanese participants pondered whether the bottles contained beer or sake. One pair of Awiakay participants wondered what kind of leaves are being dried on the bars in picture 2 (Figure 7; see also section 4.1.3 concerning perspective issues in this interpretation), hesitating between tobacco—which was more logical—and the seeds of *Arecoid pal*, which more closely resemble the leaves portrayed. Duna speakers, whose homelands are in the New Guinea Highlands region, usually spent some time pointing out the palms in pictures 6 (see Figure 1) and 14 to each other, apparently regarding them as a highly noteworthy and significant feature. This was perhaps spurred by the fact that different vegetation types are understood in real life and in narratives as metonymic indexes of different altitudes (see also Haley 2002; Kendoli 2011; Stewart & Strathern 2005). Even though the descriptive content of these botanical “distractions” may not in itself touch upon social cognition, these kinds of discussions generated a rich amount of relevant data on identificational, attention-drawing, and recognitional constructions (see also 4.2.2).

4.1.3. INTERPRETING GRAPHIC CONVENTIONS. People's varying interpretations and descriptions of depicted items point out some of our own graphic conventions and stereotypes. For example, the crisply outlined circle in the sky in picture 14, which we had thought of as the sun, has been understood by many participants to be a full moon, demonstrating a more representationally accurate and less conventionalized interpretation. In picture 3 (Figure 9), a solid black shading in the corner of the room behind the sitting figure was perceived by Awiakay participants as a giant mythical python, just about to harm the seated man. The pictures thus come alive in ways that one could not have imagined.

The use of thought and speech bubbles has represented some particular challenges, as many participants have been completely unfamiliar with this convention. Awiakay participants had the general convention explained to them and appeared to understand it. However, in completing the task all but one participant interpreted the bubbles as either different pictures or just another detail of the scene appearing “up there.” For example, in picture 15 (Figure 11) the characters in speech bubbles were understood as other people who had come close to watch the man and woman fighting. The one participant who made use of the convention was perhaps basing this on experience with Christian illustrations, as he described two thought bubbles in picture 10 as representing distinct thoughts that belonged to God and to Satan.¹¹ Speakers of Lamjung Yolmo who weren’t introduced to the concept of speech and thought bubbles prior to the task treated them as unrelated events that were occurring separately to the main image.

In other cases, the speech/thought bubble concept was rapidly assimilated, or even over-extended. Once people had the idea that pictures could be thoughts, they occasionally decided that *everything* in a particular picture was from someone’s thinking, rather than representing a “real” event in the story. In a different kind of extension, one Duna speaker identified the older man in the background in pictures 12 and 15 (Figure 11) as a thought that was following the main protagonist around “like a little child.” This interpretation was probably assisted by the relatively small size of the older man, represented using a standard perspective-drawing technique to show increased distance from the “front” of the scene.



FIGURE 11. About to hit (Picture 15)



FIGURE 12. Thinking of home (Picture 16)

¹¹ Some participants from Papua New Guinean communities may have related the task stimulus materials to textless pictures used in local church settings as props for morality stories and biblical narratives.

One pair of Awiakay speakers also showed an interesting departure from conventional perspective interpretation. As mentioned in 4.2, there was some discussion concerning the identity of the leaves shown in the background of picture 2 (Figure 7). This pair decided that the leaves had been laid on a frame to dry—but readers may need to consider the picture upside down to appreciate this interpretation. The Awiakay pair apparently had no trouble accepting that the same picture can show two different viewpoints simultaneously, whereas most Western viewers would probably find the 180-degree twist within the same frame unexpected and problematic (unless primed for a Cubist approach).

4.1.4. ORGANIZING AND CONNECTING THE PICTURES. The original *a-p* storyline (see table 2) has been reproduced almost exactly by certain participants (most notably English, Bulgarian, German, and Japanese speakers), but there have been several connections made that we had not anticipated, some of which have already been described in the preceding sections. The “redemption arc” of the original story, that is, with the central character returning chastened to his family and refusing a drink, has been produced in some cases and not in others (see also footnote 11). The Awiakay did not link alcohol with family violence: drinking and drunkenness is exclusively a town activity, or associated with visiting villages some distance away, and is not thought of as something that enters the domestic sphere.

The process of arranging the cards in order has shown some interesting variation in placement and directionality. The majority of participants set the cards out in a linear order of left to right, either in one continuous row, or in a set of rows (moving from furthest away from the speakers to closer to the speakers), as might be predicted by a left-to-right reading bias (Fuhrman & Boroditsky 2010), but this was not universal. For example, one group of Iwaidja speakers laid out the cards in a circle, and on one occasion Ku Waru speakers began with a left-to-right row and then continued with a right-to-left row beneath it. Similarly, a Duna pair started the story in the bottom right corner of the available surface, and snaked the story up in three rows, right-to-left, left-to-right, right-to-left.

Several groups of speakers did not find the idea of laying out the cards as a single linear story very compelling. In trials of the task in 2009, one group of Ku Waru speakers did not set up any linear narrative, but set the cards out in a circular arrangement and described them as showing different life stages and experiences. One pair of Lamjung Yolmo speakers created two separate stories, played out as either separate events in one man’s life, or stories concerning two different people, as well as a smaller vignette of a couple gardening, which they felt was not in keeping with either of the other two stories. Even with prompting, they were unwilling to combine the three separate stories into a single narrative. Another pair of Lamjung Yolmo speakers felt that the order in which the cards were given was a sufficient narrative and chose not to reorder the cards. To the Awiakay speakers, it did not seem appropriate to connect several pictures in a single story; each picture was a story in itself. Clair Hill reports some similar experiences with Umpila speakers.

In counterpoint to this, one group of Japanese speakers discussed the importance of constructing the story as a coherent whole according to narrative aesthetics. In response to a query from the audience about the story, one teller commented, “Well, we decided that

this picture comes first, because despair comes prior to hope. We think that it's better for the story to get happier later. This is our scenario" (NE jp090319-dvo.ikst).¹²

4.2. A CLOSER LOOK AT THE LANGUAGE MATERIAL RECORDED.

4.2.1. QUOTED UTTERANCE AND EMOTION. Despite some problems, the speech/thought bubble convention has been extremely successful in prompting people to consider the internal lives and thoughts of the characters they were dealing with, and the depictions led to extended passages of indirectly and directly quoted utterance, in line with the original aims of the project. These data will support further investigation of structural, semantic, and pragmatic properties of represented speech, thought, and emotion. Two examples from Iwaidja and Japanese, both occasioned by picture 16, "thinking of home" (Figure 12), are shown in (1) and (2), respectively.¹³ The Iwaidja example features free direct speech without any syntactic embedding, whereas the Japanese example includes three layers of embedding within the frames of 'I think', 'the picture shows', and '[he] is imagining'.

- (1) *abiny* "aa *janara* *barda* *free*, *bardiwabarda*
 3SG.say:PP ah 1SG.away.FUT.go finished free finally
- janara*, *ayun-man-ayan* *wanad*,
 1SG.away. FUT.go 1SG>3PL-FUT-see 3PL
- aban-ayan* *ngabi* *arijumartan* *ngabi* *barrakamu*,
 1SG>3SG.FUT-see 1SG child 1SG wife
- ayun-man-ayan* *ba* *ngabi* *ngartung* *ngadbarlanbarlarrud*."
 1SG>3PL-FUT-see DET 1SG 1SG.OBL my.family
- rukburduka* *ijbu-n-alDIMakbany*.
 right.here.3PL AWAY-FUT-meet.up

¹² まあ僕らがこれを先に決めたのは、ええと、絶望があって、希望の順序で、どんどん明るい方向になった方がいいだろうと、そういうシナリオです。

Maa bokura ga kore wo saki ni kimeta no wa, eeto, zetsuboo ga atte kiboo no zyunzyo de dondon akarui hookoo ni natta hoo ga ii daroo to soo iu shinario desu.

¹³ Interlinear glosses follow standard abbreviations suggested in the Leipzig Glossing Rules (<http://www.eva.mpg.de/lingua/resources/glossing-rules.php>), with the following additions: ABIL, abilitative; ATTR, attributive adjective; CNJ, conjunct; CONJEC, conjecture; CONT, continuous; CS, contrasted subject; DUB, dubitative; EMPH, emphatic; INDV, individual; INTER, interjection; MIR, mirative; NF, non-final verb; OPIN, opinion; PI, past imperfective; POL, polite; POT, potential; PP, past perfective; PREV, previous; PSN, person name; RP, remote past; SEQ, sequential; SPEC, specific; SHRD, shared; SNS, sensory; STAT, stative; SUB, subordinator; UNCERT, uncertainty. Data source annotations follow practices of individual authors.

‘He said/spoke, “Ah, I’ll go now, I’m free. And so I’ll go. I’ll see them. I’ll see my child. My wife. I’ll see all my family.” Here he’s going to meet them.’

[Iwaidja Warruluj iw090222-dvo.rwra-tell.eaf {0:09:59–0:10:24}]

- (2) で、出た後はこんなことがまってるだろうな、
 というのを想像している図だと思います

De de-ta ato wa konna koto ga
 and come.out-PST after TOP this matter SBJ

matte-ru daroo na to iu no wo
 wait-CONT CONJEC ATTR that_says NMLZ ACC

soozoo shi-te iru
 imagination do-CNJ be

zu da to omo-imas-u.
 picture be COMP think-POL-NPST

‘Then, [I] think [this] picture shows that [he] is imagining what will happen to [him] after going out [of prison].’

[Japanese Inagaki jp090319-dvo.ikst3.eaf {0:05:56–0:06:02}]

Represented utterances have turned up some interesting, previously unattested constructions. For example, in Iwaidja the prohibitive particle *yinang* ‘don’t!’ is widely used with second-person subjects, and until this task was recorded, there were no examples of it being used with a first-person subject. But in one running of the task it turned up as part of the moral reasoning engaged in by a character wrestling with the allure of drinking (3).

- (3) *abana-wularru-n yinang aw-ardama*
 1SG>3SG.FUT-give.up-NPST NEG.IMP 1SG>3SG-follow(NPST)

bardaka waliwi
 DEM bad

‘I’ll give up, I shouldn’t follow the way of evil.’ [Iwaidja RW]

The picture task can encourage the use of emotion terms. For Umpila, the frequency of emotion vocabulary in the picture task data was high compared to the narrative corpus, adding significantly to the semi-spontaneous data concerning these terms (Clair Hill, pers. comm., 2011). Depicted gestures and postures of the characters are also very important in stimulating quoted utterance, description, and discussion of inner states. For example, one pair of Duna speakers interpreted the flat-palmed hand of the witness to the assault in picture 15 (Figure 11) as a specific “quotable gesture” (Kendon 1992, 2004), ‘Don’t do it!’ Ku Waru speakers interpreted a similar flat-palm gesture in picture 11 in the same way: “He held his hand up and said, ‘Don’t do that.’”

Many speakers talked about the posture of the main character in the courtroom scene (picture 5; see Figure 2). For example, in their final co-construction of the complete narrative, Duna speakers KK and WK highlighted the man's bowed head as revealing his preoccupation with his own actions (4).

- (4) KK: *kho piki-ta ka-ta, kho kho-nga [?] po-na enene*
 3SG bow.head-SEQ be/stand-SEQ 3SG 3SG-EMPH ? do.PFV-SPEC true
 'He bows his head, he himself did those things, it's true.'

WK: *enene po-na-yatia-ko*
 true do.PFV-SPEC-IPFV.SNS.PREV-SUB

piki-sopa-ta reya angu wa-ta
 bow.head-below-SEQ be/put.IPFV RESTRICT do-SEQ

kei-na. ē.
 be/stand.STAT-SPEC aff.
 'It's truly what he did (he feels), and he just bows his head down and stays like that. Yes.' [Duna, 2009-DV08.3]

Areas of exploration that this material can feed into are diverse, including, for example, complement structures, polysemies and extensions of relevant speaking/thinking/feeling verbs, and uses of direct and indirect quotation (or intermediate mixes of the two) within both third-person and first-person narrations.

4.2.2. KNOWLEDGE-RELATED MORPHOLOGY. To understand social cognition and grammar, we want to look at other cognitive categories in language, as well as represented utterance. Overall, getting a handle on knowledge-related morphology is facilitated by data from semi-controlled tasks where people's actual knowledge is substantially more inferable than in most natural settings.

Lamjung Yolmo, like many related Bodic languages, has a copular verb that can also be used as a sentence-final particle to convey evidential or epistemic value (DeLancey 2001). Without the picture task, it had been difficult to elicit these verbs in any kind of near-naturalistic context. However, as shown in (5), the speakers alternate between three copular forms: *yimba*, *yindɔ*, and *dù*.

- (5) A: *dì tʃi yimba*
 this what COP
 'What is this?'

A: *màgi yimba*
 corn COP
 'It's corn.'

S: *mòdze* *tìle* *dù*
 banana like COP.MIR
 'It's like bananas.'

A: *màgi* *yìnqo*
 corn COP.UNCERT
 'Maybe it's corn.'

S: *màgi thó* *pè* *dù*
 corn cradle do COP.MIR
 'They're cradling corn.'
 [Lamjung Yolmo, 091108-01 01:14–01:22]

The *yimba* and *yinqo* copulas have a certainty distinction, with the latter indicating lesser certainty than the former. The picture task is a perfect opportunity to elicit grammatical structures of uncertainty as the speakers try to make sense of the images they are presented with. This recording is taken from earlier on in the task, when the speakers are negotiating the content of the images, hence speaker A reduces her certainty when speaker S suggests that perhaps the images are not of corn.

The other copula used is the *dù* form. Here we see it being used as both a standard copula—in speaker S's first utterance in (5)—and as a sentence-final particle in the final utterance. This dual function of the copula is a common strategy in Bodic languages, but can be difficult to elicit in less flexible tasks. The analysis here follows Hari (in Hari & Lama 2004), and the *dù* form is glossed as a mirative; however, here it is functioning more like a visual evidential, and further analysis may show this is its more common function.

Example (6) is much more like a typical mirative. Here, the speaker realizes for the first time that the men in two different images are actually the same person across a narrative.

(6) *dì-raŋ* *dù-ba*
 3SG.M-EMPH COP.MIR-EMPH
 'That is him!'
 [Lamjung Yolmo, 091108-01 27:55]

The picture task, with its surprising plot developments, makes it much more feasible to record naturalistic data that includes the mirative, which can be hard to elicit in more structured settings. Where possible, the task-based data can be further evaluated against spontaneous material to check that it is representative of meanings and functions of the relevant forms in unstaged speech.

For the language Ngarinyin, the picture task elicited a large number of occurrences of the potential marker *-karra*, usually translated by speakers as 'might be'. This is the most prominent expression of epistemic modality in Ngarinyin. As the morpheme is typically an enclitic on the first constituent of the sentence, it is found on both nominal (7) and verbal phrases.

- (7) *koondikarra* *jinamoo*
 koondi-**karra** jinamoo
 husband-POT M.DEM
 ‘He might be her husband.’
 [Ngarinyin, fn 10.26]

The suffix was relatively frequent with the root *-ma-* ‘say, think, do’.¹⁴ In these constructions, *-karra* can indicate uncertainty on behalf of the current speaker about the action/speech/thought represented in the picture (8; first occurrence in 9), or attribute these features to some reported speaker (second occurrence in 9).

- (8) “wow” *amakarra*
 wow a-ma-**karra**
 INTER MSG-say-POT
 ‘He might be saying “wow”.’
 [Ngarinyin, fn 10.35]

- (9) *ngalakoo* *booloobakarra* *ngiyerri* *amakarra*
 ngala-koo booloo-ba-**karra** nga-iy-yi-yirri a-ma-**karra**
 food-DAT look-ASP-POT 1SG-FUT-be-CONT MSG-do-POT
 ‘He could be thinking/saying, “Maybe I can go look for food”’; more freely
 translatable as ‘Maybe he wants to go look for food’.
 [Ngarinyin, 090813.7:44–7:47]

Although the modal marker *-karra* is not uncommon in Ngarinyin narrative, the range of functions elicited by the picture-sequencing activity was particularly rich and proved the task successful in eliciting two of its target constructions, reported speech/thought and epistemic modals.

In the Duna case, the explicit frame of problem-solving and discovery provided insight into the combinatorial properties and meanings of certain epistemic markers. Two bound morphemes, *-ra* and *-pa*, are known to be able to occur as final morphology, but are very rare in narrative data. The ‘shared standpoint’ marker *-ra* typically marks established information concerning events that have happened in the very recent past, and are known about by others (e.g., the addressee) as well as the speaker. The ‘individual standpoint’ morpheme *-pa* usually marks information that is fresh to the speaker, concerning present-time events, and that s/he does not expect others to share. The meanings of these morphemes appear to be incompatible, but data from the picture task showed that *-ra* and *-pa* can, in fact, co-occur. Example (10) is taken from a point in the task where the participants have already established a rough idea of a single coherent narrative, and are now arranging the

¹⁴ For reasons of clarity the relevant meaning is cited in the glosses, but the root *-ma-* is the same in all instances and may also translate as ‘say’, ‘think’, ‘do’, or ‘want’. (The ‘want’ reading is only possible when the complement clause has future tense marking.)

pictures in order. A certain picture card and the event it depicts are items that the speaker and his interlocutor have already discussed, but the exact location of this event in the narrative sequence is a new idea.

- (10) *oke, ima-na sa-ta ro-na hinia-ra-pa.*
 okay woman-SPEC hit-SEQ be/put.PFV-SPEC this.one-SHRD-INDV
 ‘Okay, the one where the woman’s been hit, it’s this one.’ (i.e., ‘it’s the one that we already know about, but that I have just found the right place for’)
 [Duna 2009-DV]

Prompted by the occurrence of this form in the picture task data, Duna consultant Petros Kilapa further suggested (11) as another situation in which *-ra-pa* would be apposite: speakers A and B have returned from visiting Jerome, who gave them a cigarette to take home with them. Speaker A is looking for the gift, which Speaker B has already forgotten about.

- (11) A: *Jeromi-ka ngi-na ai-ka si. ka si=pe.*
 PSN-CS give-SPEC who-CS hold.STAT 2SG-CS hold.STAT=Q
 ‘Who’s got what Jerome gave? Do you have it?’
- B: *O, Jeromi-ka hawa ndu ngi-ra-pa.*
 excl. PSN-CS tobacco one give-SHRD-INDV
 ‘Oh, Jerome gave us a cigarette!’ (‘That’s right, now I remember!’)
 [Duna LSRXVI]

Examples (10) and (11) suggest that the combination of the forms is appropriate where the speaker recognizes a situation as representing shared knowledge, but simultaneously (re)discovers an aspect of it that is new to him or her.

Overall, the data-gathering task has stimulated the spontaneous occurrence of previously under-recorded structures that employ knowledge-related morphology, as well as giving rise to questions concerning the delicate and complex assessments of knowledge that individual languages facilitate.

4.2.3. THE INTERACTIVE NATURE OF THE DATA. All of the material collected through the picture-sequencing activity is interactive to some degree, from the core tasks (e.g., audience-directed presentation and narration of the pictures) to the peripheral activities surrounding them (e.g., task instructions, reproaches, post-mortem discussion). This has consequences for the kinds of language and language structures that it generates. For example, interrogative terms are notoriously difficult to elicit,¹⁵ yet Iwaidja speakers produced almost every kind of Iwaidja question term within the first 15 minutes of the task, as

¹⁵ Producing typical exchanges of the type: Fieldworker: “How do you say ‘who is this?’” Speaker: “She’s my cousin.”

the speakers intensively discussed, queried, and resolved issues of identity upon first sight of the pictures.

Likewise, the Ku Waru data revealed particularly interesting features concerning the interactive use of three contrasting demonstratives indicating various degrees of shared knowledge of the referent. The three demonstratives are:

i(lyi) ‘This one’, ‘that one’, where the referent is treated as immediately present to and identifiable by both speaker and addressee.

kan(i)- ‘That one that we know about’, where the referent is treated as identifiable via shared knowledge between speaker and addressee, but is not immediately present.

ad(i)- ‘That one that we don’t really know about’, where the referent is treated as neither present nor fully accessible to either speaker or addressee.

During the first phase of the task, where the participants are given the pictures one at a time and asked to describe what is in each, the contrast between *i(lyi)* and *kan(i)-* was repeatedly illustrated by the use of *i(lyi)* in reference to the picture that the participants were currently looking at and discussing, and of *kan(i)-* in reference to pictures that had already been examined and discussed. Examples occur in the exchange between Wapi and Kuin, shown in (12).

(12) W: *ilyi* *yi* *kan-iyi*
 this man that-DEF
 ‘This is that man.’¹⁶ (glossed by Ku Waru transcription assistant Andrew Noma as ‘the man that we know’)

K: *ilyi* *ola* *o-ba* *mol-ur-um-iyi*
 this up come-NF stay/be-RP-3SG-DEF
 ‘This is that one that came and stood up.’ (in picture 12, as previously discussed between them)
 [Ku Waru]

The contrast between *ad(i)-* and *kan(i)-* was exemplified in reported speech and thought attributed to the male protagonist in the story as he reflects upon his misdeeds. For example, when Wapi is looking at picture 16, “thinking of home,” in the first phase of the task, she attributes the thought shown in (13) to the man in jail.

¹⁶ To get the right reading of this translation in English, one has to pronounce ‘that’ with secondary stress and ‘man’ with primary stress: the prosodically realized distinction between the *that* of ‘that mán’ and the *that* of ‘thát man’ in English is similar to the lexical one between *kan(i)-* and *i(lyi)* in Ku Waru.

- (13) *ui-nga* *adi* *nabi-si-p* *molu-ru-d-ja*
 before-GEN that what-do-NF:1 stay/be-RP-1SG-DUB
- i* *nyi-ba* *pilyi-ri-m*
 that say-NF:3SG hear-RP-3SG
 “‘Why did I act like that back then?’” he thought to himself.
 [Ku Waru]

Example (13) contrasts with another of Wapi’s utterances in reference to the same picture in the later third-person narrative phase of the task. That later formulation was identical to (13) except for the use *kan* in place of *adi*. The effect of this shift was to attribute a greater degree of psychological distance between the man’s present contemplation and his past actions in the initial description than in the narrative phase. Alternatively, it could be accounted for as an instance of “leakage” between the reported thought that is attributed to the man in the picture and the speech event in which it is being reported by Wapi (cf. multiple perspective constructions, as described by Evans (2007)). Under this interpretation, the shift from *adi* to *kan* is conditioned in part by the fact that Wapi and Kuin have by that stage already seen and discussed the pictures of the man’s wife-beating activities twice before and can therefore treat that knowledge as common ground between themselves, in contrast to the self-estranged view of the activities that they attribute to the man in prison.

The picture task recordings include many *in situ* examples of directives, agreement-elicitation formulae (e.g., tag questions), and response tokens, as people appeal to their interlocutors to share in the assessment of a picture and recognize a feature within it as possible “proof” of a certain activity, relationship, or sequence. Duna speakers, for example, use a range of different minimal agreement response tokens, including the sentence pro-form *ẽ*, a stretched bilabial nasal *mmm*, and an ingressive nasal (see Pitschmann 1987, Eklund 2007). The shared process of looking at and arranging the pictures has also provided examples of grammatical structures that were not attested in the existing Duna corpus (see San Roque 2008). These included, for example, a formulaic use of a perception verb in combination with the ‘opinion’ particle *=pi* and interrogative marker *=pe* for checking and directing an interlocutor’s awareness and attention.

In interrogatives, *=pi* ‘OPIN’ is typically used to ask about the addressee’s considered opinion, approximated in the following translations with the English verb *find* (14).

- (14) *hinia* *roae-nopo* *=pi=pe*
 this.one be/put.CAUS-ABIL =OPIN=Q
 ‘This [picture] can be put [here] (you find)?’
 [Duna 2009-DV]

The opinion marker is not typically used in interrogatives with a second person subject (15). It sounds odd to specify mediated knowledge in this context, as indeed it does in English.

- (15)?* *Julinda, ko heya =pi=pe*
 PSN 2SG come.IPFV =OPIN=Q
 Julinda, is that you coming (you find)?
 [Duna LSRXVI]

However, in doing the picture-sequencing task, speakers frequently marked sentences headed by the verb *ke-* ‘see’ with *=pi=pe* to confirm that the addressee was seeing or looking at something (16).

- (16) *anoa-na kono edo ngoya-na ke =pi=pe*
 man-SPEC thought across go.IPFV-SPEC see =OPIN=Q
 ‘The man’s thoughts are going there, [you] see?’
 [Duna 2009-DV]

The interactive nature of the problem-solving activity thus revealed that speakers can use *=pi=pe* in a formulaic query to express their expectations as to the addressee’s attention, perhaps in order to direct and coordinate it with the speaker’s, a pivotal feature of social cognition.

4.3. FUTURE DIRECTIONS FOR COMPARING RESPONSES. The picture task generates data that has both spontaneity and comparability, providing exciting opportunities for within-language and cross-language comparison. The Ku Waru data discussed in section 4.2.3 illustrate how the picture task can produce a wealth of new evidence concerning language features by combining relatively open-ended participant interaction with systematically contrasting task environments. The phases of the task allow for the investigation of structural options that express the same or similar meanings, but under distinct informational or discourse conditions.

This can be further exemplified for the domain of kinship in Iwaidja. In this language, kinship relations can be encoded either with kinship nominals (17a), or with kinship verbs (17b) that specify relationships between their subject and object arguments (see Evans 2000a, 2006a).

- (17)(a) *ngabi bunyi* (b) *ngabi ngani-martyarrwun*
 1SG father 1SG 3MSG>1SG-be.father.to
 ‘my father’ ‘my [one such that] he is father to me’
 [Iwaidja]

The picture task has shed light on several issues concerning the distribution of kinship expressions in Iwaidja, three of which are briefly outlined here.

As both nominal and verbal expression of kinship is possible, a first question about Iwaidja is what conditions speakers’ choice of whether to encode relationships with nouns or verbs. The picture task data answer this by suggesting that kinship verbs are the most unmarked strategy in narratives. Nominal kinship words are either used more specifically

as address terms, or when describing relationships *other* than those pertaining to the main protagonist.

Kinship verbs can themselves be used either predicatively or as arguments, where the verb is part of a headless relative clause. Within the picture task data, predicative use is common in the initial phase of the activity, where kinship relations are being established, as in (18).

- (18) *anb-aya-n* *ba* *barlkbarrakan* *ari*
 3SG>3PL-see-NPST DET old.man 3SG.stand(NPST)
- mana* *ri-martyarrwu-ny* *janad* *wurduwajba*
 UNCERT 3MSG>3SG-be.father.to-PST 3SG woman
 ‘The old man is watching them. Maybe he’s the father of the woman.’
 [Iwaidja]

In argument use, the referent of the relative clause can be either the subject *or* the object argument of the kinship verb. Indeed, it is often the case that when hearing the word *rimakan* (from the verb *maka* ‘be husband to’; see examples 19–21) in free speech, it is unclear whether the meaning is ‘his wife’ or ‘her husband’; an advantage of the picture task is that the visual depictions make the reference clear, particularly when combined with either deictic gestures or verbs denoting actions only attributable to one of the characters.

During the initial phase of the task, speakers use the verb *maka* ‘be husband to’ in referring to both the man (19) and to the woman (20) in the story. At this stage speakers are concerned with finding out and identifying relationships. There is no main character established, and different people can be considered topical in different scenes.

- (19) *mana* *ri-maka-n,* *a* *angku-wa-ny*
 UNCERT 3MSG>3SG-be.husband.to-NPST ah 3SG>3ANG-consume-PST
- maldurdan*
 be.drunk
 ‘Maybe **her husband** drank till he was drunk.’
 [Iwaidja]

- (20) *karlu* *kart-aya-ng* *ri-wu-ng* *ri-maka-n*
 NEG 2SG>3SG-see-PP 3MSG>3SG-hit-PP 3MSG>3SG-be.husband.to-NPST
 ‘No, you didn’t see that he hit **his wife**.’
 [Iwaidja]

There are also examples where *maka* is used for the dyad ‘husband and wife’, that is, where the referent is formed by unifying the subject and object (21).

- (21) *ijba-naka-niny* *ba* *ngaldaj* *ri-maka-n*
 3PL:away-go:DU-PI DET together 3MSG>3SG-be.husband.to-NPST
- a-naka* *arijumartan*
 3PL-go:DU(NPST) child
 ‘The two of them are walking along, **husband and wife**, (together with their)
 child.’ [Iwaidja]

During the narrative phase, however, the flexibility shown in 19–21 is no longer apparent. Instead, the main character (the man) is always taken as the anchor point for reckoning the relationship, and the other argument of the verb is taken as the referent. Thus, all 11 occurrences of the verb *rimakan* ‘the one such that he is husband to her’ always refer to the wife, and never to the husband. Similar to the importance of the main protagonist role to the choice between kinship nominals and verbs, the establishment of a topical deictic center is revealed to be a crucial factor in kinship reference strategies during the extended narrative.

In addition to using such data to clarify language-specific problems, it can also be collated cross-linguistically to examine a range of questions, such as: (a) whether similar effects of discourse on the choice of which argument is referent is found in other languages with kinship verbs, (b) how much languages, and speakers, vary in the proportion of scenes they construe in terms of kinship as opposed to other characteristics (e.g., ‘the man’, *el hombre golpeador* ‘the man assailant’¹⁷), (c) how willing speakers are to presume particular kinship relations, and to what extent they use epistemic modulation (‘that must be her husband’) to portray relationships, and (d) how frequently they characterize pairs of individuals in terms of independent one-place predicates (e.g., ‘the man and the boy’) and how frequently in terms of mutual relationships holding between them (e.g., ‘the father and his son’ or, in a typical Aboriginal language, using a dyad¹⁸ construction like *beyko* ‘father and son’ in Dalabon). A key question in the field of ethnosyntax is why particular categories get coded in some languages and not others, and it has been argued a number of times (e.g., Evans 2003, Simpson 2002) that frequency must be part of the explanation. Using a task like this to get broadly comparable data on what sorts of expressions are used to formulate reference, in a range of discourse contexts, across a range of languages, is an important way to build up a database of parallel formulations—something we are currently pursuing.

The preliminary results reviewed in this and the preceding section illustrate ways in which the materials can elicit both predictable and unexpected structures at morphological, interactional, and discourse levels, allowing insight into a range of linguistic practices. In the following section, we further examine the relevance of such capacities to language documentation.

¹⁷ This was one phrase used to describe the central male character in the Spanish version recorded in Mexico City.

¹⁸ Dyad constructions create terms for referring to pairs defined by their mutual kin relationships, for example, father and son; in many Australian languages they are formed by adding a derivational ‘dyad’ suffix to one term of the relationship, for example, *ngamathu* ‘mother’ *ngamathu-ngarrb* [mother-DYAD] ‘mother and child’. See Evans (2006b) for details.

5. STRUCTURED TASKS AND LANGUAGE DOCUMENTATION. Within typology, stimulus-based language elicitation tasks are recognized as central to investigating questions of both language-specific and cross-linguistic relevance, having the potential to contribute to descriptive accuracy and comprehensiveness, inform typology, and scaffold detailed ongoing study of relationships between language and cognition. Yet their value to documentary linguistics, with some recent exceptions (e.g., Thieberger 2012, Bower 2010), is rarely explicitly recognized—or at best treated as ambiguous.

On the one hand, activities such as narrative problem-solving and the other tasks discussed in section 2.1 are classified by Himmelmann (1998) as quite low in spontaneity, being staged communicative events that involve props. Himmelmann suggests that staged events may lack genuine communicative function, and Lüpke (2006) argues that they can be misrepresentative of natural language use. This view is supported, for example, by de Leon (2009), who found that Tzotzil children's narratives produced using the Frog Story stimulus materials in some cases totally lacked evidential marking. However, evidential marking is a typical feature of Tzotzil narrative, and was strongly present in more culturally resonant stories told by the same children, without the use of pictures. Thus, the Frog Story activity might record people speaking Tzotzil, but does not document Tzotzil practice (see also Foley 2003 concerning Watam Frog Story narratives).

On the other hand, stimulus-based tasks potentially increase the absolute size of a data corpus, satisfying one of the widely agreed-upon desiderata for documentation (Woodbury 2003). As long as stimuli-derived data are identified and annotated appropriately, they can complement more naturalistic corpora, and play an important role in achieving balanced documentation (Himmelmann 1998, Lüpke 2009). Tasks can also be designed and executed within small language communities as activities that train field consultants in documentation techniques and develop more culture-specific elicitation materials, such as *The Cassava Film*, which was created by Kari'ña speakers in collaboration with the language researcher (Yamada 2007). Stimulus-based tasks such as the one outlined in this paper are, we argue, thus an important contribution to documentary practice.

In terms of pushing the investigation of an individual language, stimuli materials are very effective for increasing representation of linguistic structures. They frequently winkle out data relevant to understanding the full potential of the grammatical apparatus, especially in the case of domains that are highly complex and variable (e.g., deictic categories), or items that are low in frequency (see also Seifart 2005:293–294). This is illustrated by the enhanced documentation of items such as emotion terms, knowledge-related morphology, demonstratives, and kin terms as discussed in sections 4.2 and 4.3. In these situations, stimuli may have an advantage over traditional elicitation, as they “offer some direction to the linguistic behaviour of contributors without directly focussing their attention on their linguistic behaviour” (Himmelmann 1998). In addition, they have the advantage—in contrast to, for example, historical narratives, myths, or other accounts—that the nature of their referents is clear from the pictures there in the context. As with elicited data, structures that are attested in stimuli-based data can be cross-checked with examples of unstaged language use, building a more complete picture through triangulation from different data types (see also Lüpke 2009: 71).

As well as having advantages for the analysis of an individual language, stimulus-based tasks are vital in ensuring that there is data comparability (of various kinds) across

languages. This builds the power of matched data sets into the steadily increasing corpora that are being compiled for the world's languages. Many questions can only be answered by looking at corpora that are matched or parallel in some way. Examples are questions about frequency of particular categories (e.g., whether referents are characterized in terms of kin, group membership, by name, or by other means), and about the consequences of design choices such as whether to express a given meaning by inflectional morphology or prosody. We might ask what impact such design choices can have on frequency of expression, and the organization of discourse or narrative, and about the relationship between expressing certain phenomena through some form of conversational gambit (e.g., pausing as a hedge or non-commitment) or through grammaticized structures. Without the power of comparable data, such questions simply cannot be addressed, yet it is questions like these that lie at the heart of what those interested in language diversity claim to offer general theories of language.

Finally, good language documentation should also be representative of diverse genres and contexts (Woodbury 2003), ideally including samples of all the covert and overt communicative event categories recognized by the language community (Seifart 2008, Senft 2010). Such comprehensive representation is not always possible, but the kind of task described here can contribute to recording language use in cooperative problem-solving, instruction-giving and receiving, questioning, agreeing and disagreeing, expressions of judgment, explanation, narrative, and response. Story-building problems are a time-efficient tool for recording interactive talk that is task-focused and explicitly goal-oriented. Such talk is likely to be more transparent to the data gatherer than completely spontaneous conversation, but is also empathetically engaged. The activities are potentially entertaining and thought-provoking for language speakers. In the case of languages that only have a very few living speakers, the amount of spontaneous interactive language use that can be documented may be quite limited. This kind of activity stimulates types of interaction that speakers might not typically partake in together, and can in this way make a dramatic contribution to the corpus (see also Grinevald 2003).

We suggest that task responses are a rich source of cultural information and expression. While the structured situations are odd and novel, to say they do not involve genuine communicative functions would be a summary judgement. These strange events are part of lived and spoken experience, and just as our design choices for elicitation tasks may document our own world of conventions and interpretive biases, the way people respond to, change, and execute them may tell us something about theirs. What else is there to talk about?

APPENDIX 1

**Language and Social Cognition Data Elicitation Picture-Sequencing Task:
'Family Problems' Story**

This information last updated 8 June, 2011.

The main aim of the picture task is to record rich data about a wide range of categories relevant to social cognition, including both narrative and interactive material. A focus within this is to elicit data that includes a high amount of speech and thought reporting, reference to emotion, and/or is collected in situations of explicit knowledge symmetry and asymmetry (i.e., where it is clear to all that the speech event participants do/do not all have access to the same information simultaneously). Material from the picture task can contribute to a wide range of studies, for example concerning comparative narratology, information structure, cultural tropes, and the effects of rehearsal on performance, among many others.

THE PICTURES. The 'family problems' story materials consist of 16 picture cards. These illustrate events that can fit together as a narrative in which a man gets drunk and hits his wife, is arrested, goes to jail, and eventually returns home. Participants in the task talk about the pictures and arrange them (on a flat surface) to form a coherent story.

Although the story was originally planned with the pictures occurring in a particular sequence, many different arrangements of the pictures are possible. This is not a problem, as the main aims of the task are compatible with any activity where people talk about the pictures, regardless of any order that they put them in. In one trial of the task a participant spread the pictures out without any linear order, and described them as a group that together represented troubles and dramas that he (or his family members, etc.) had experienced. This kind of response is fine, too. However, participants should also be encouraged to describe the pictures as forming a narrative at some point in the session.

The pictures have a set presentation order (i.e., the order in which they should be handed to participants). Remember to make sure the pictures are in this order before you start the task.

1	Homecoming	9	Taken by police
2	Receiving clothes	10	Thinking about gaol
3	Alone in the cell	11	Refusing drink
4	Drunken gossip	12	Hitting
5	In court	13	Family talking together
6	Walking together	14	Standing in light
7	Sitting drinking	15	About to hit
8	Garden together	16	Thinking of home

For field use, the pictures are printed A5 size (148 x 210mm) on relatively heavy stock paper and laminated to make them easy to handle and less likely to blow away or get damaged. Copies of these images are downloadable from the LD&C website (<http://hdl.handle.net/10125/4504>).

PARTICIPANTS. The pictures deal with situations of alcohol abuse and family violence that are extreme to some communities, but viewed as quite typical by others. Individual researchers and their language consultants should assess whether these themes are appropriate for viewing and discussion by all community members, and select participants accordingly.

It must be made clear to the participants that they are being audio- and video-recorded, and that, depending on the permissions they give, other people may have access to these recordings.

Ideally participants will:

- enjoy and get involved in the task.
- empathise with the characters and situations.
- understand the graphic conventions (speech and thought bubbles).
- understand the task specifications (breakdown into subtasks; ordering of pictures; distribution between monologic and dialogic subtasks).
- talk freely, vividly, and unselfconsciously.

As an absolute minimum, running any version of the picture task requires two participants, A and B. Running the full set-up requires at least one more person (C) who has not seen the pictures before.

If possible, pair up people that do not have typically asymmetrical roles in this kind of talking/presenting scenario. For example, in a Highland New Guinea context it will generally be better for A and B to be a same-sex peer pair, as in mixed-sex/age pairs it is more likely that one participant will dominate the session and talk much more than the other participant.

You may also need someone (e.g., a field consultant) to help you explain the task to the participants, and be in control of handing each card over. If so, make sure this person has a good understanding of the task procedure and understands the convention of speech/thought bubbles so that they can explain this as necessary.

TASK PROCEDURE. There are two different ways to run the picture task, Set-up 1 (the main method) and Set-up 2. If the number of possible participants is very small, run Set-up 1 only.

Set-up 1 (Main task)

Participants A and B are given the pictures one at a time and asked to describe what is in each and then arrange them as a narrative. After this participants are asked to (re)tell the story in various ways.

The four different steps of Set-up 1 and wordings for suggested instructions are as follows.

1. Individual card descriptions

'I'm giving you some pictures, one at a time, and I want you to tell me what they're about. Please describe what's happening.'

Note: Don't tell people at this point that the pictures make up a single story; let them figure this out as they go.

2. Arranging into order

'Now please put these pictures in an order where it makes a story. There are lots of different possible stories - just choose whichever way you think works best.'

3. Conventional third person telling with the pictures to an (if possible, naïve) audience.

'Now tell [participant C] the story in the pictures.'

4. First person tellings

'Now (re)tell it, pretending you are one of the people in the story. Explain what's been going on in your life.'

(If the speakers alternatively chose to tell a first person narrative at step 3, prompt a third-person telling now. Different speakers may also choose to take the point of view of different characters (e.g., the man, the woman, the child) and each present 'their' version of the story.)

Set-up 2 ('Back-to-back')

This set-up should be undertaken with participants other than those who have done set-up 1, and uses a much-reduced set of five pictures (5, 7, 9, 12, 15).

1	Homecoming	9	Taken by police
2	Receiving clothes	10	Thinking about gaol
3	Alone in the cell	11	Refusing drink
4	Drunken gossip	12	Hitting
5	In court	13	Family talking together
6	Walking together	14	Standing in light
7	Sitting drinking	15	About to hit
8	Garden together	16	Thinking of home

Participant A holds the pictures in such a way that B cannot see them (e.g., the participants are sitting back-to-back). Participant A describes what is happening in the five pictures and B, based entirely on A's description, must direct A how to lay out the pictures from first to fifth. After this B gets to look at the pictures and the pair can together retell the story as a whole.

1. Participant A describes the pictures

'[Participant A], explain to [Participant B] what is happening in each of the five pictures.'

2. Participant B masterminds the arrangement of the pictures

'[Participant B], tell [Participant A] what order the pictures go in order to make a story. Ask any questions you like.'

3. Telling the story

'Now both of you look at the pictures and tell the whole story together.'

RECORDING. Where possible the task should be recorded with both video and audio equipment. Ideally the camera will be positioned so as to capture both participants and the surface that the pictures are laid out on. If two cameras are available then one can be used to film the picture arrangement (e.g., suspended above the pictures) and the other camera can cover the participants. Or, if following Set-up 2, one camera can film each participant.

A separate (pictorial or written) record should be made of the order the pictures end up in (e.g., by taking a photograph of the layout at the end of the session).

If you are recording in parallel remember to:

- wait until you have turned on all devices before slating the recording
- make a sharp noise/gesture (e.g., a clap or tap) to assist in synchronising the different recordings later.

ARCHIVING. Recordings associated with the Family Problems task are being archived in a collection called “SocCog” within PARADISEC (The Pacific And Regional Archive for Digital Sources in Endangered Cultures). Specific access rights are to be determined by the researcher and those who appear in the recordings (or their family members or executors), as per usual archiving practice. At the present time, items must be deposited through one of the PARADISEC portals in Canberra, Melbourne, or Sydney.

A series of informative documents concerning archiving has been developed and can be accessed online (via the ANU Alliance site) with a personal login. Contact Julia Miller (julia.miller@anu.edu.au) or one of the people named below to obtain a login and for further details.

FURTHER INFORMATION AND CONTACTS. If you have questions about running the picture task, please contact one of the following people:

Nicholas Evans, nicholas.evans@anu.edu.au
Lila San Roque, lila.san.roque@gmail.com
Barbara Kelly, b.kelly@unimelb.edu.au
Alan Rumsey, alan.rumsey@anu.edu.au

You may find that additional variations of the task are especially suitable for the community you are working with, or useful for investigating particular aspects of language or culture that you are interested in. If you develop a new way of running the task or using the pictures, please let us know about it! Thank you.

The illustrations are the work of Alice Carroll (<http://alicecarroll.net/>) and the picture task should be cited as follows:

Carroll, Alice, Nicholas Evans, Darja Hoenigman and Lila San Roque. 2009. The family problems picture task. Designed for use by the Social Cognition and Language Project. A collaboration of The Australian National University, Griffith University, University of Melbourne and the Max Planck Institute for Psycholinguistics.

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Lila San Roque
lila.san.roque@gmail.com